

Currently Pending Claims for USSN 09/421,106

1. A substantially purified nucleic acid molecule, said nucleic acid molecule capable of specifically hybridizing, under conditions of 6.0 x sodium chloride/sodium citrate (SSC) at about 45°C, followed by a wash of 2.0 x SSC at 50°C, to a second nucleic acid molecule having a nucleic acid sequence selected from the group consisting of SEQ ID NO: 1 through SEQ ID NO: 10 and complements thereof.
2. The substantially purified nucleic acid molecule according to claim 1, wherein said nucleic acid molecule comprises a microsatellite sequence.
3. The substantially purified nucleic acid molecule according to claim 1, wherein said nucleic acid molecule comprises a region having a single nucleotide polymorphism.
4. The substantially purified nucleic acid molecule according to claim 1, wherein said nucleic acid molecule comprises a nucleic acid molecule having a nucleic acid sequence selected from the group consisting of SEQ ID NO: 1 through SEQ ID NO: 10 and complements thereof.
5. The substantially purified nucleic acid molecule according to claim 4, wherein said nucleic acid molecule further comprises a bacterial ORI site.
6. The substantially purified nucleic acid molecule according to claim 1, wherein said nucleic acid molecule has a promoter or partial promoter region.
7. The substantially purified nucleic acid molecule according to claim 6, wherein said promoter region comprises a CAAT cis element and a TATA cis element and an additional cis element.
8. A vector comprising a nucleic acid sequence selected from the group consisting of SEQ ID NO: 1 through SEQ ID NO: 10.

9. The vector according to claim 8, wherein said vector further comprises a second nucleic acid sequence selected from the group consisting of SEQ ID NO: 1 through SEQ ID NO: 10, wherein said second nucleic acid sequence is not identical to the first nucleic acid sequence.

16. The vector of 8, wherein said vector is a bacterial artificial chromosome.